

PATENT ABSTRACTS OF JAPAN

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C09K 3/16

(21)Application number : 2000-263216

(71)Applicant : TOKUSHIMA PREFECTURE
CHIIKI SANGYO GIJUTSU
KAIHATSU KENKYU KIKO

(22)Date of filing : 31.08.2000

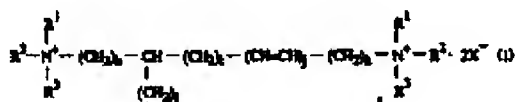
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SENOO MAKIKO
FUKUI TOMOYA
MAEDA TAKUYA
KENKI JUNICHI

(54) QUATERNARY AMMONIUM SALT COMPOUND, METHOD FOR PRODUCING THE SAME AND APPLICATION THEREOF

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a compound having antimicrobial effect and antistaticity, particularly a compound capable of imparting polymeric materials with surface properties such as antimicrobial effect and antistaticity.

SOLUTION: This compound is a quaternary ammonium



salt compound of the general formula (1) [wherein, R1 and R2 are each a 1-3C alkyl; R3 is a (substituted) 6-18C alkyl; R4, R5 and R6 are each H or a 1-3C alkyl; X is an organic or inorganic acid residue; h, i and k are each an integer of 0-17; j is 0 or 1; h, i, j and k total ≤ 17 ; l is an integer of 0-18; and m is 0 or 1]. The 2nd objective method for producing the compound and the other objective application of the compound are provided respectively.

(19) 日本国特許庁 (JP)

再 公 表 特 許 (A1)

(11) 国際公開番号

W02002/080447

発行日 平成16年7月22日 (2004. 7. 22)

(43) 国際公開日 平成14年10月10日 (2002. 10. 10)

(51) Int. Cl. ⁷

H04L 9/08

H04L 9/32

F I

H04L 9/00 601C

H04L 9/00 675B

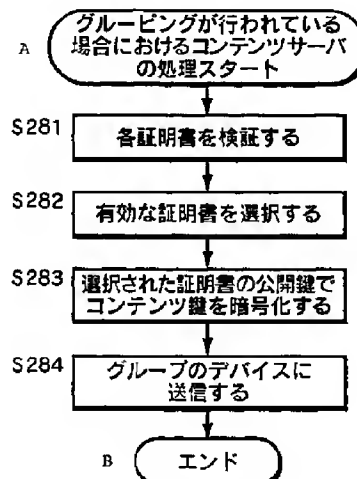
H04L 9/00 601F

審査請求 未請求 予備審査請求 未請求 (全 43 頁)

| | | | |
|--------------|---|----------|----------------------------|
| 出願番号 | 特願2002-577332 (P2002-577332) | (71) 出願人 | 000002185 |
| (21) 国際出願番号 | PCT/JP2002/002957 | | ソニー株式会社 |
| (22) 国際出願日 | 平成14年3月27日 (2002. 3. 27) | | 東京都品川区北品川6丁目7番35号 |
| (31) 優先権主張番号 | 特願2001-94808 (P2001-94808) | (74) 代理人 | 100082131 |
| (32) 優先日 | 平成13年3月29日 (2001. 3. 29) | | 弁理士 稲本 義雄 |
| (33) 優先権主張国 | 日本国 (JP) | (72) 発明者 | 石黒 隆二 |
| (81) 指定国 | EP (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), CN, JP, KR, US | | 東京都品川区北品川6丁目7番35号 ソニー株式会社内 |

(54) 【発明の名称】 情報処理装置

(57)



A...CONTENT SERVER START WHEN GROUPING IS PERFORMED
 S281...VERIFY CERTIFICATE
 S282...SELECT VALID CERTIFICATE
 S283...ENCRYPT CONTENT KEY USING PUBLIC KEY OF SELECTED CERTIFICATE
 S284...TRANSMIT THE CONTENT KEY TO GROUP DEVICE
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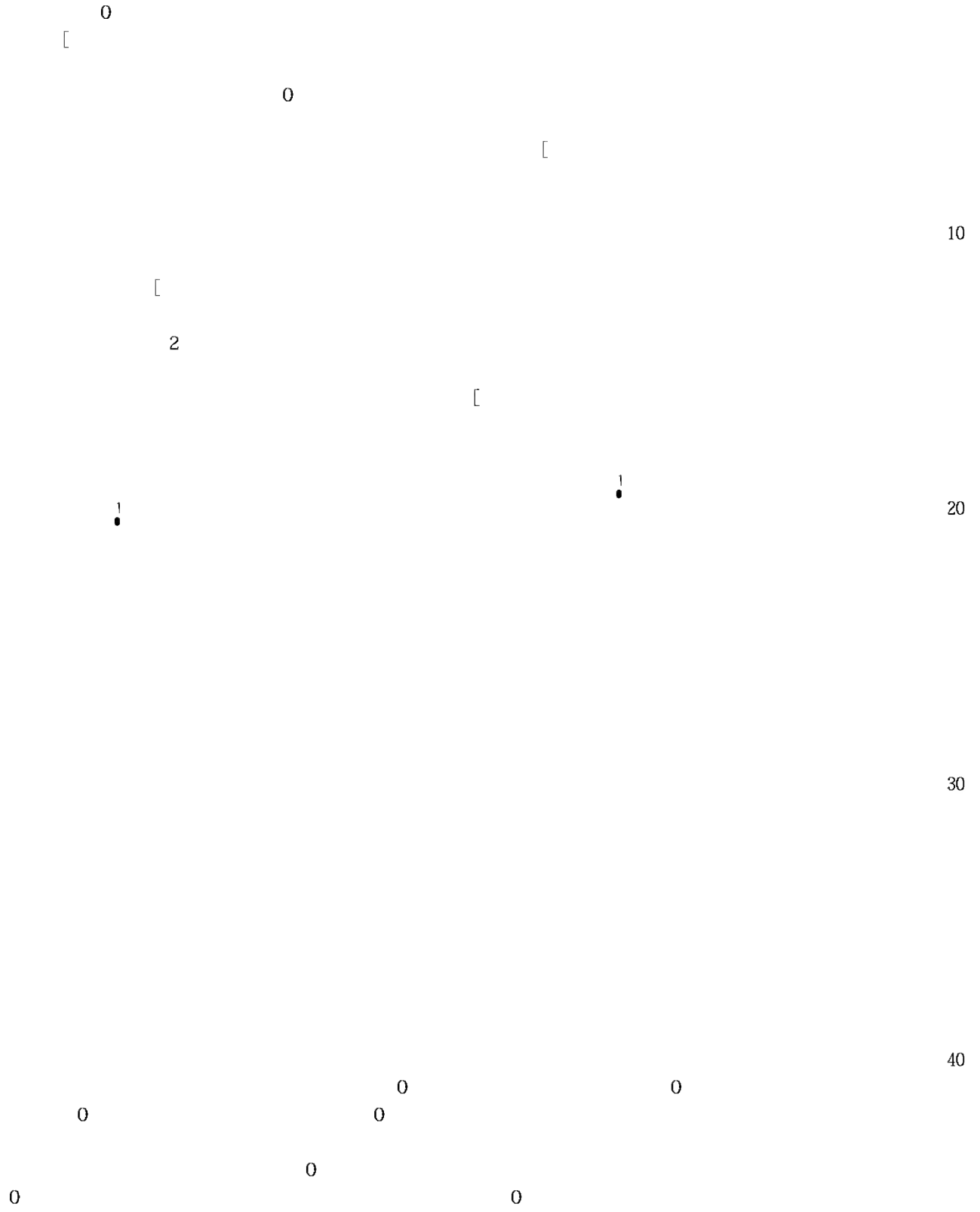
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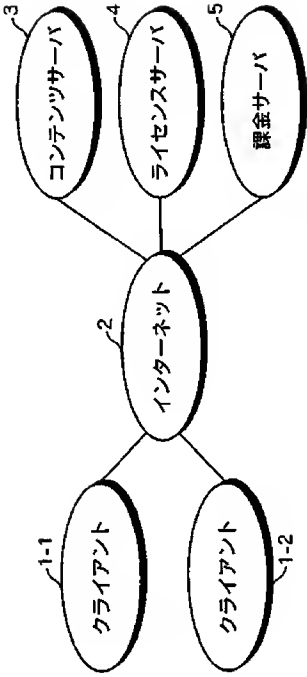


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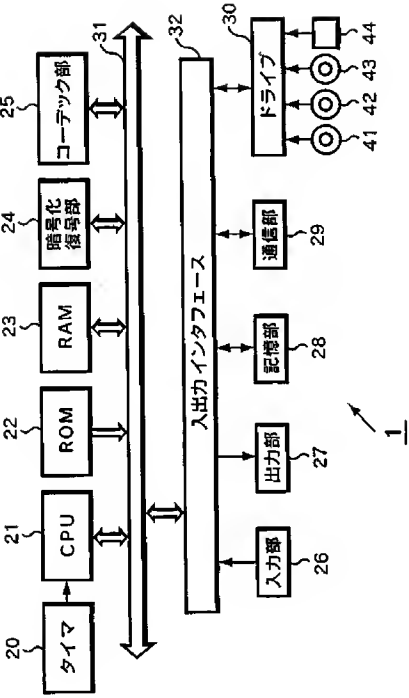


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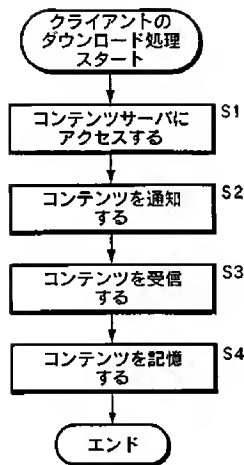


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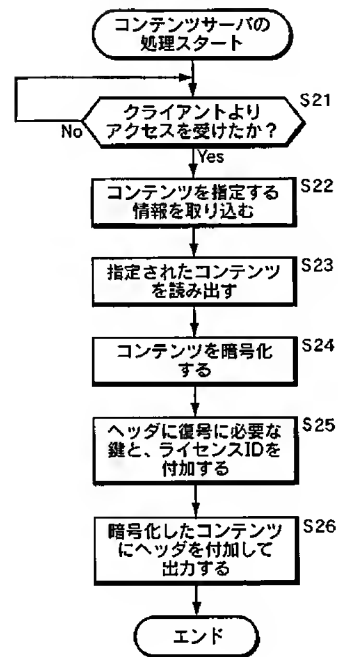


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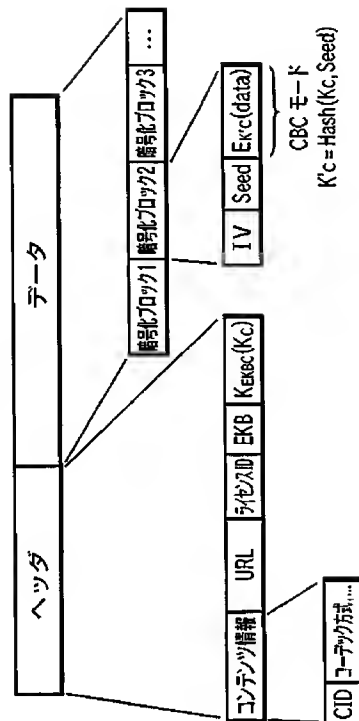


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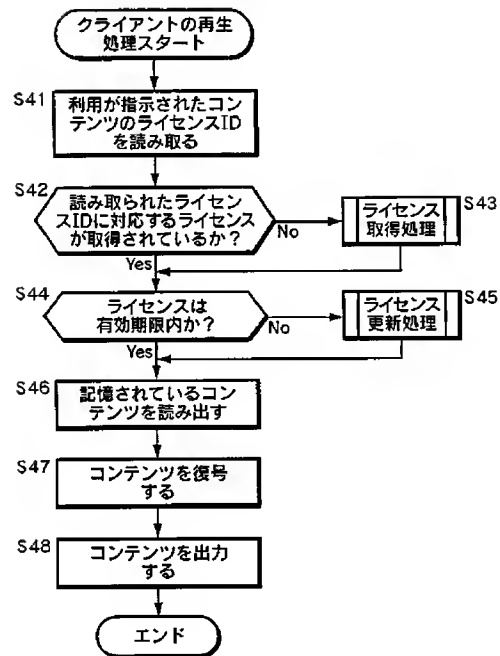


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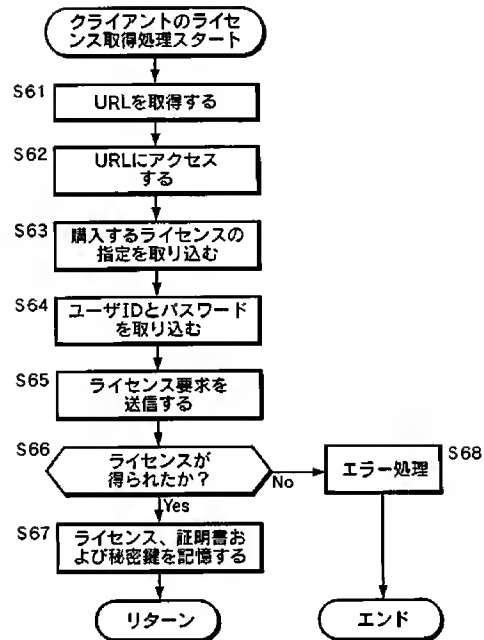


図 8

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| ライセンスID |
| 作成日時 |
| 有効期限 |
| 使用条件 |
| リーフID |
| 電子署名 |
| ライセンス |

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図 9

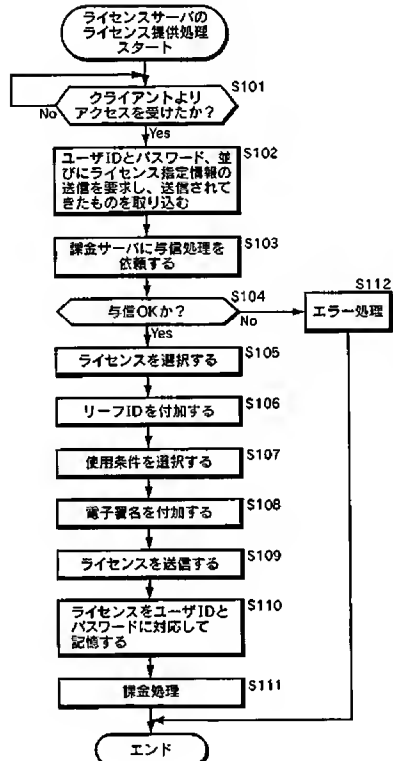


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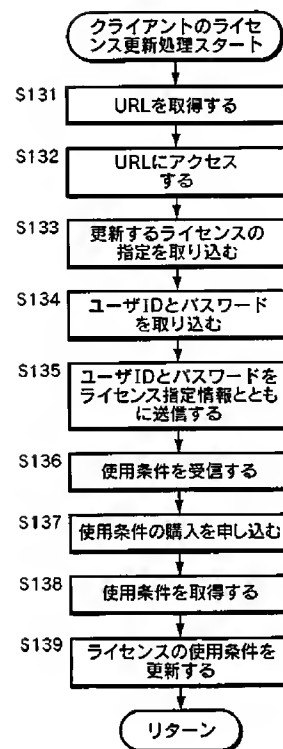


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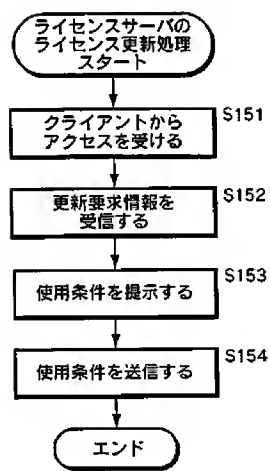


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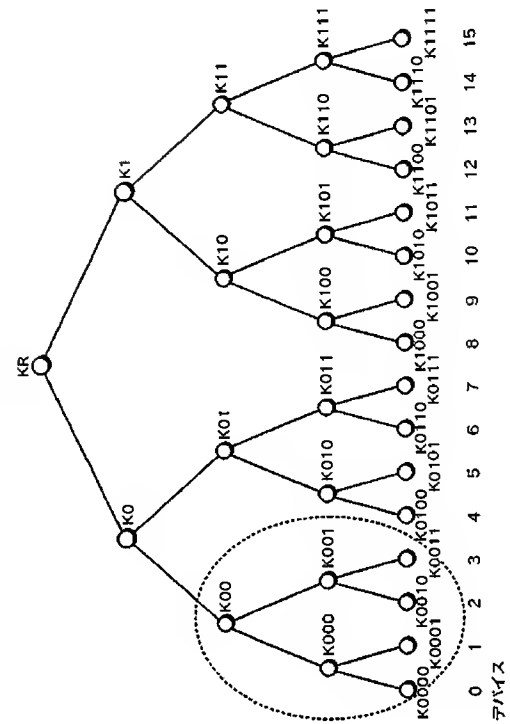


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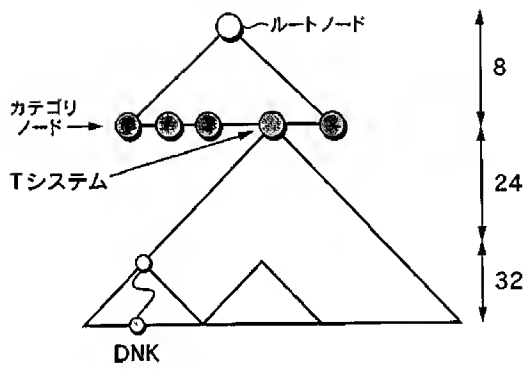


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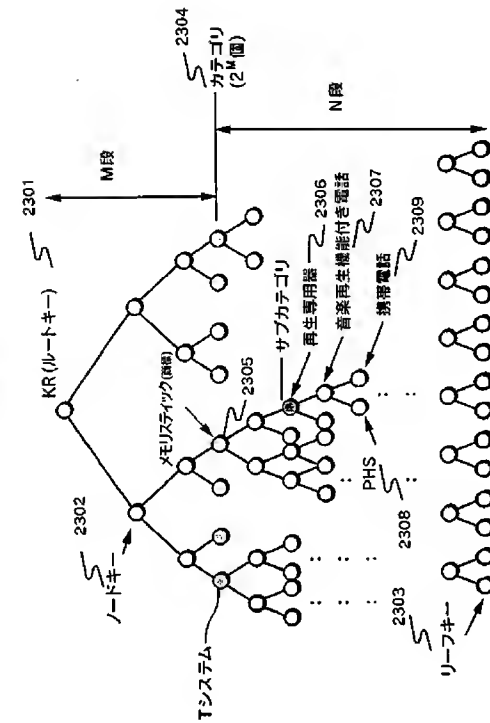


図15A

| バージョン (Version) t | |
|-------------------|----------------------|
| インデックス | 暗号化キー |
| 0 | Enc(K(t)0, K(t)R) |
| 00 | Enc(K(t)00, K(t)0) |
| 000 | Enc(K000, K(t)00) |
| 001 | Enc(K(t)001, K(t)00) |
| 0010 | Enc(K0010, K(t)001) |

図15B

| バージョン (Version) t | |
|-------------------|----------------------|
| インデックス | 暗号化キー |
| 000 | Enc(K000, K(t)00) |
| 001 | Enc(K(t)001, K(t)00) |
| 0010 | Enc(K0010, K(t)001) |

図16

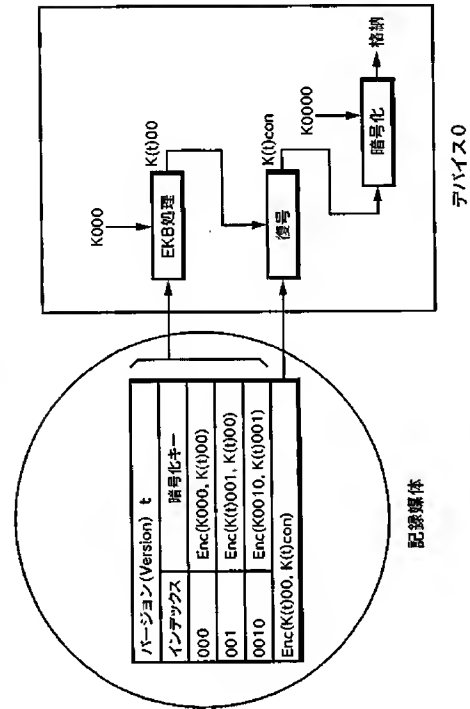
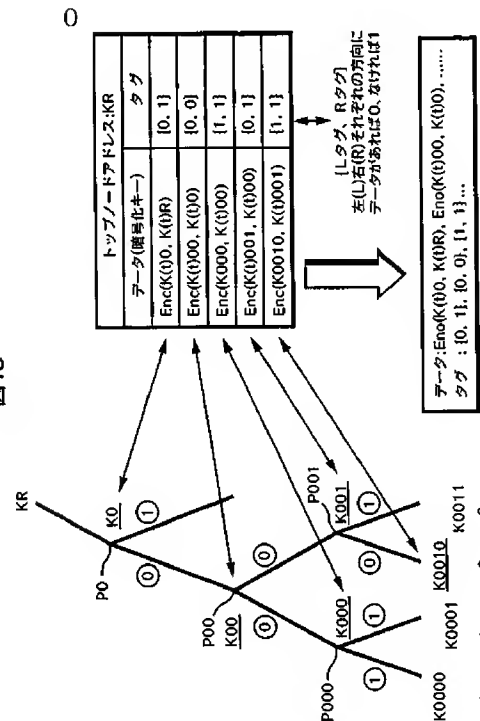


図17

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|-------------------------|----------------------------|----------------------|-----|
| 601 | バージョン (version) | デプス (depth) | 602 |
| 603 | データポインタ (Data pointer) | タグポインタ (Tag pointer) | 604 |
| 605 | 署名ポインタ (Signature pointer) | リザーブ (reserved) | |
| データ部 (E(k0, KR), ...) | | | 606 |
| タグ部 ({0,0}, {1,1}, ...) | | | 607 |
| 署名 (Signature) | | | 608 |

図18



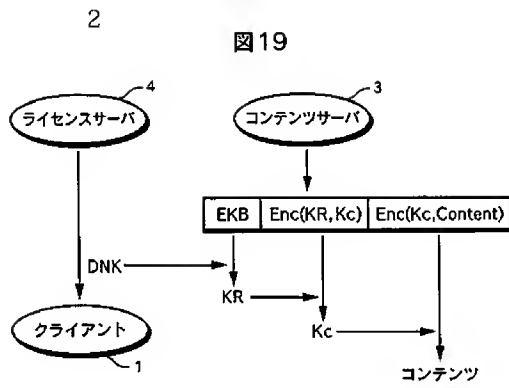


图 20

EKB

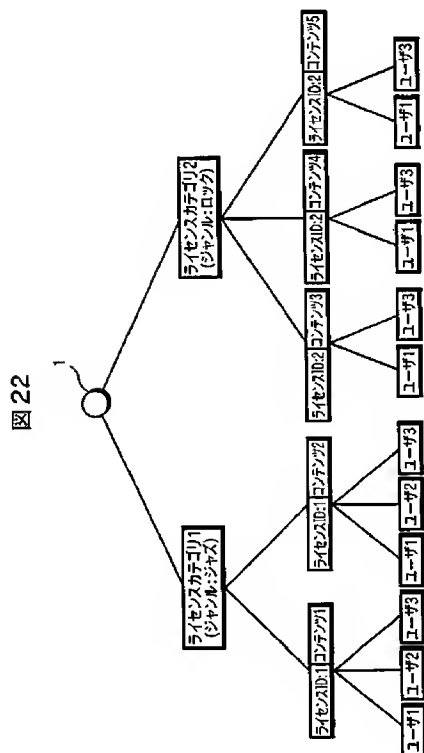
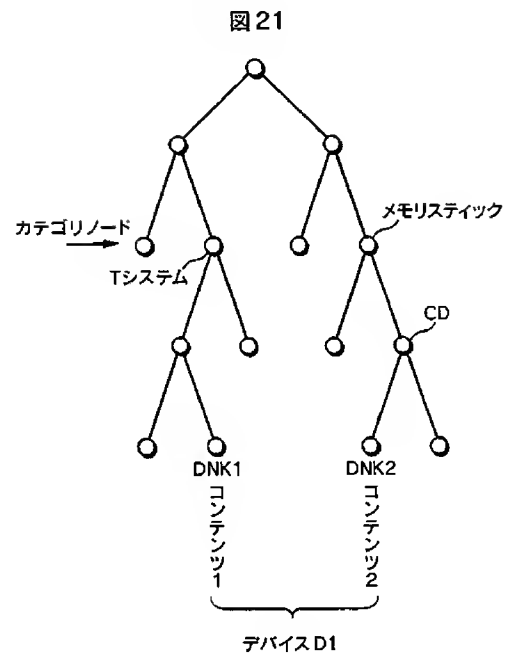
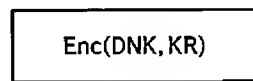


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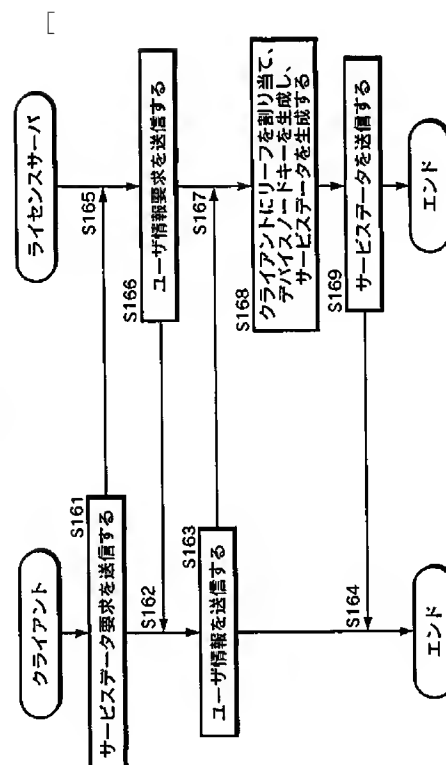


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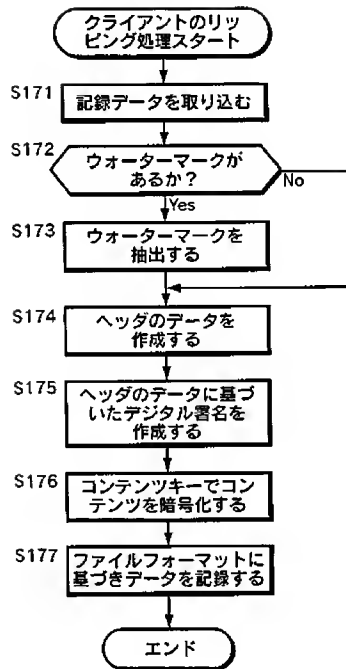


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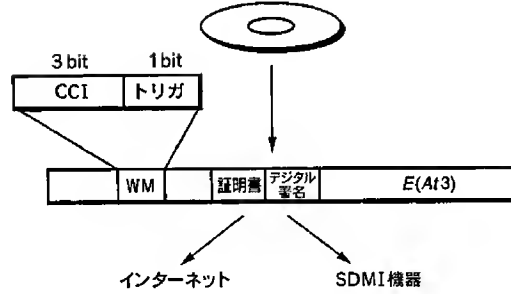


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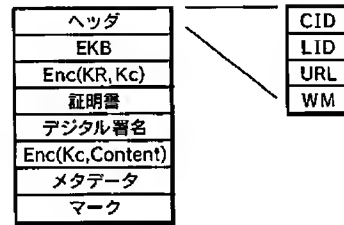
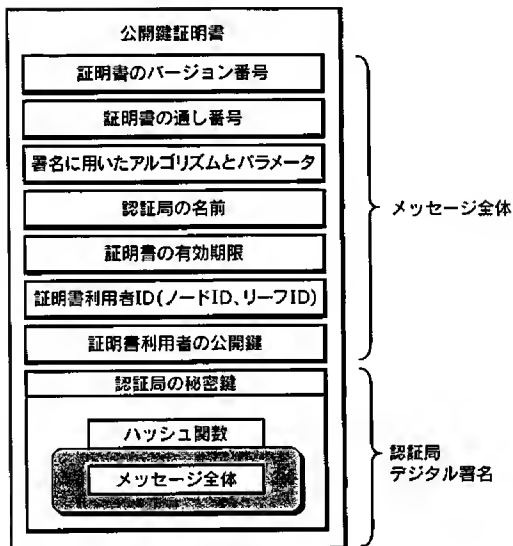
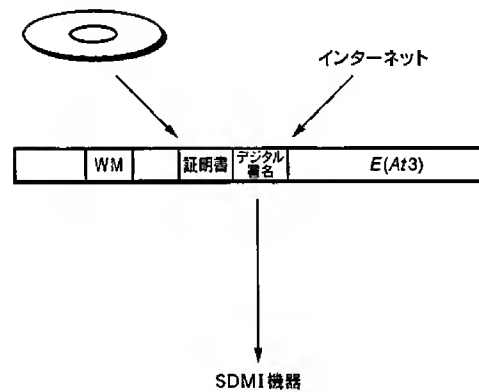


図 27



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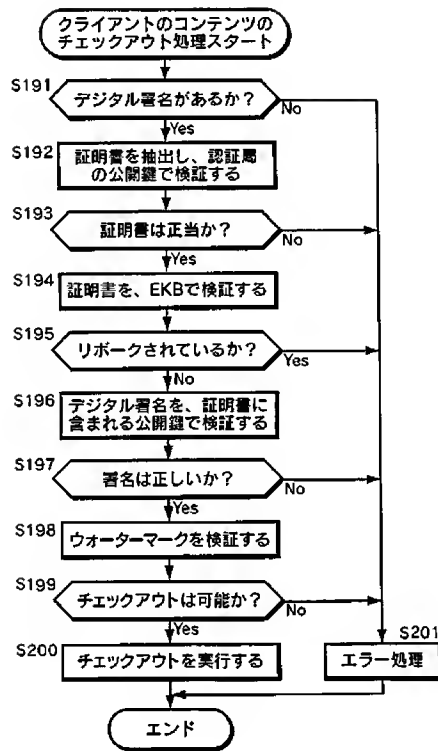


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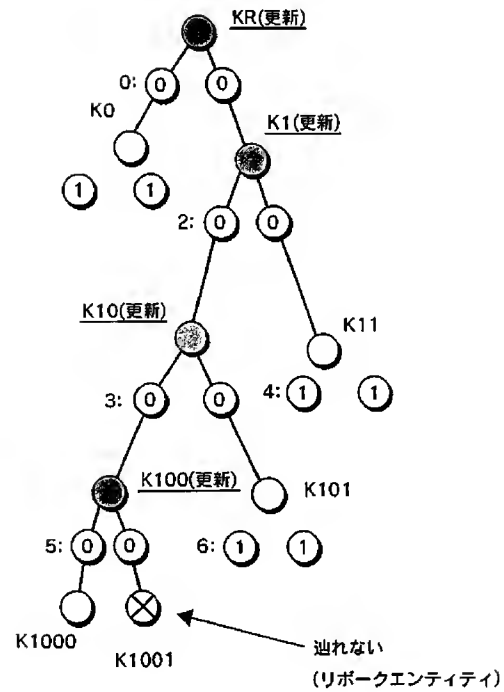


図 31

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| データ (暗号化キー) | Enc(K0, K(t)R), Enc(K(t)1, K(t)R) Enc(K(t)10, K(t)1), Enc(K11, K(t)1) Enc(K(t)100, K(t)10), Enc(K101, K(t)10) Enc(K1000, K(t)100) |
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図 32

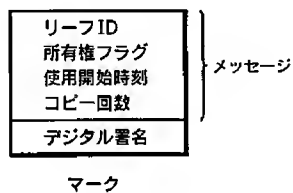


図 33

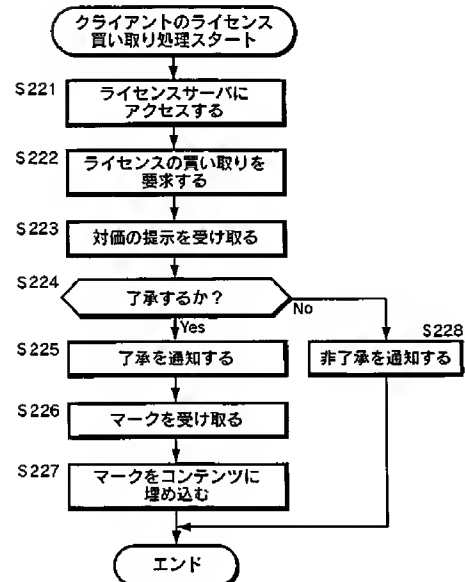


図 34

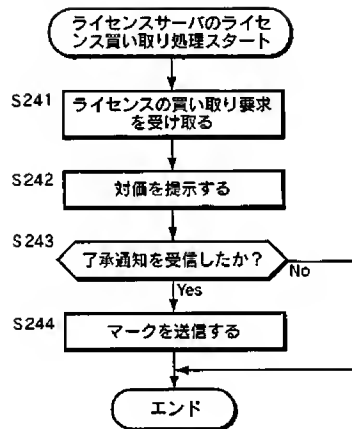


図 35

Mark = { LeafID, Own, Sigs(LeafID, Own) }

図 36

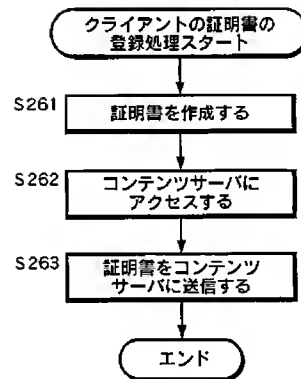


図 37

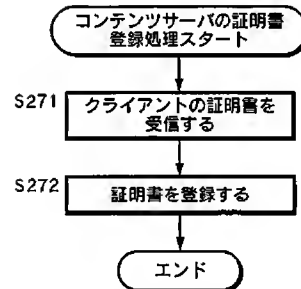


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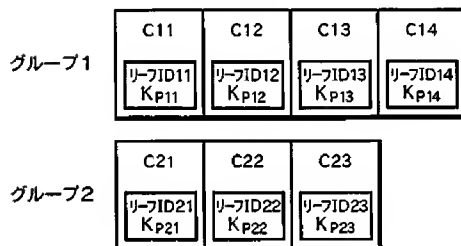


図 39

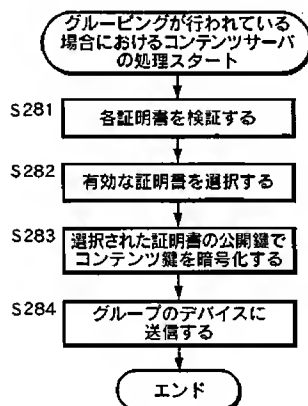


図 40

Enc(Kp11, Kc), Enc(Kp12, Kc), Enc(Kp13, Kc)

図 41

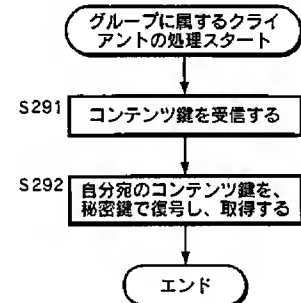


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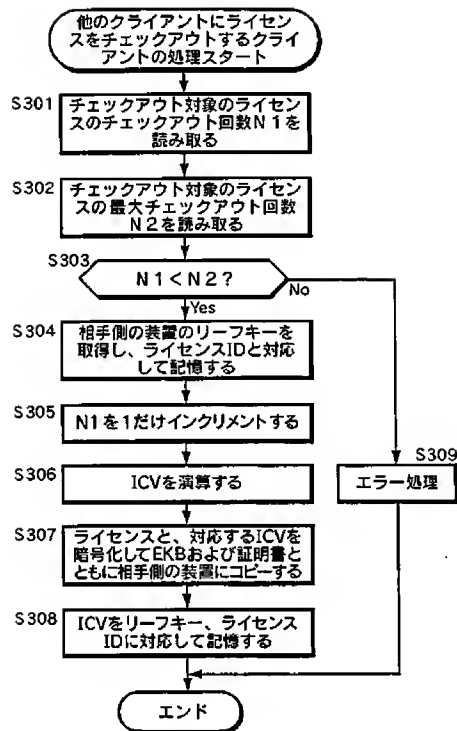


図 43

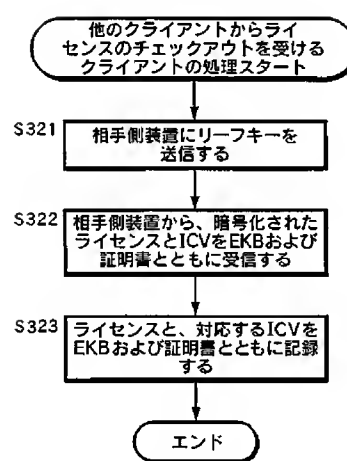


図 44

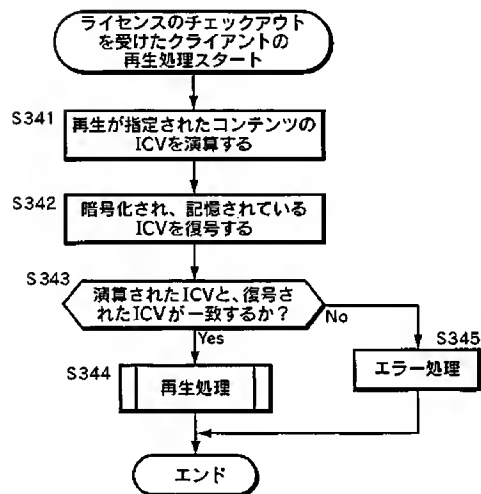


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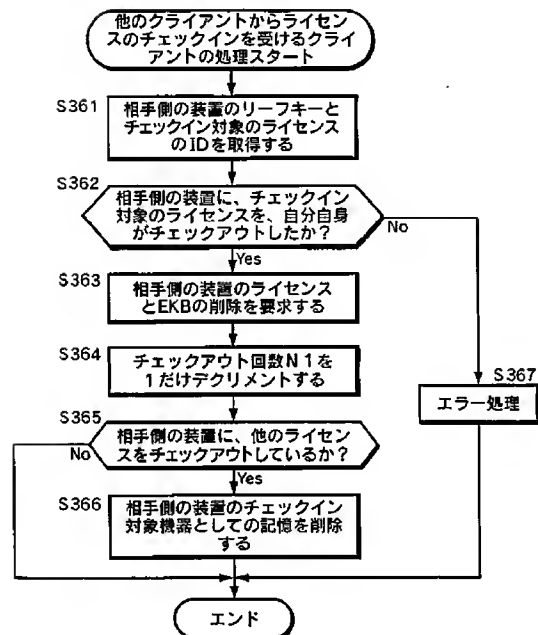


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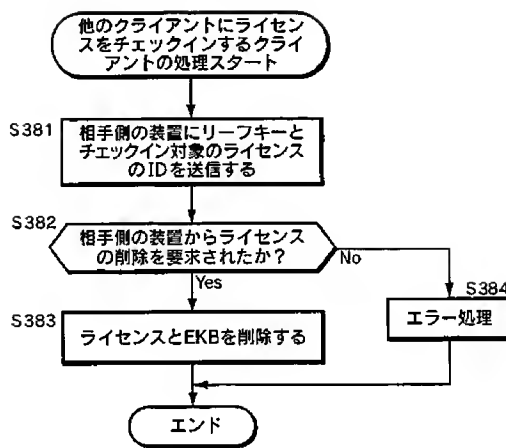


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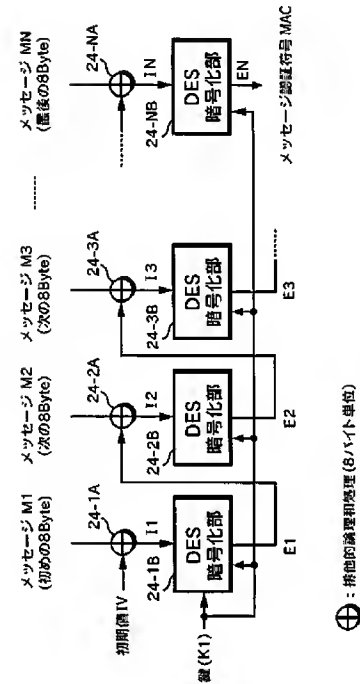


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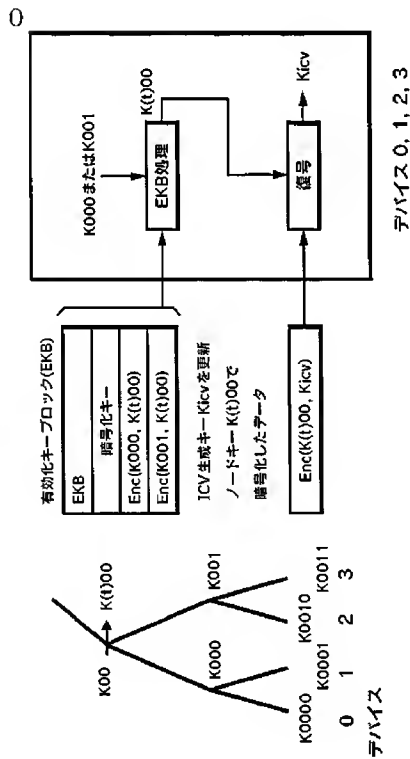


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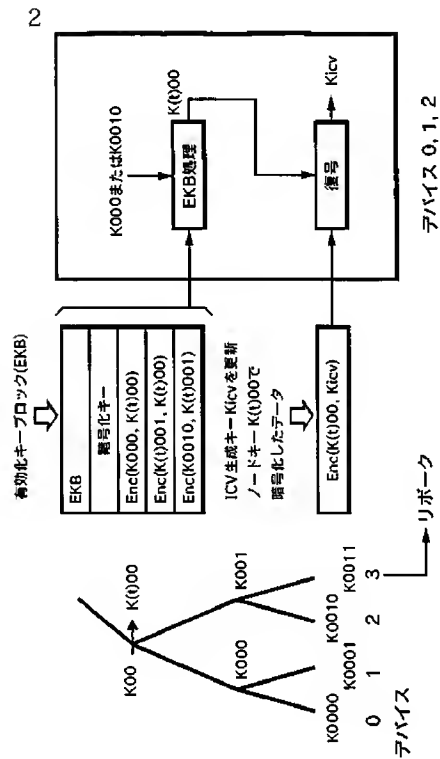


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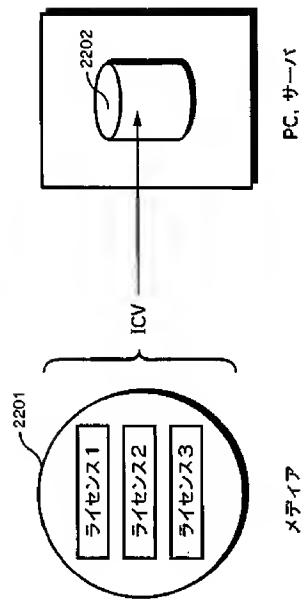


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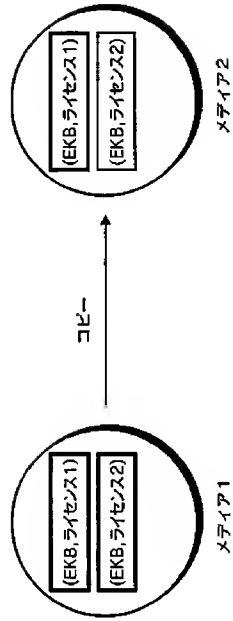
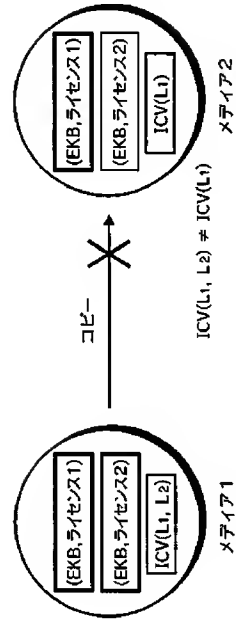


図 50B



| INTERNATIONAL SEARCH REPORT | | International application No. PCT/JP02/02957 |
|--|--|--|
| A. CLASSIFICATION OF SUBJECT MATTER Int.Cl. ⁷ H04L9/08, G06F17/60 According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int.Cl. ⁷ H04L9/08, G06F17/60 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2002 Kokai Jitsuyo Shinan Koho 1971-2002 Jitsuyo Shinan Toroku Koho 1996-2002 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | JP 11-346210 A (Nippon Telegraph And Telephone Corp.) 14 December, 1999 (14.12.99), Pat. Nos. [0001] to [0062] (Family: none) | 1-6 |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex. | | |
| * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" documents referring to an oral disclosure, use, exhibition or other means "P" documents published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "Z" document member of the same patent family | | |
| Date of the actual completion of the international search 04 July, 2002 (04.07.02) | | Date of mailing of the international search report 23 July, 2002 (23.07.02) |
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|--|---|---------------------------|----------------|
| 国際調査報告 | | 国際出願番号 | PCT/JPO2/02957 |
| A. 発明の属する分野の分類 (国際特許分類 (IPC)) | | | |
| Int. Cl. ⁷ H04L9/08, G06F17/60 | | | |
| B. 調査を行った分野 | | | |
| 調査を行った最小販賣科 (国際特許分類 (IPC)) | | | |
| Int. Cl. ⁷ H04L9/08, G06F17/60 | | | |
| 最小販賣科以外の資料で調査を行った分野に含まれるもの | | | |
| 日本国実用新案公報 1922-1996年 日本国公開実用新案公報 1971-2002年 日本国特許実用新案公報 1994-2002年 日本国実用新案登録公報 1996-2002年 | | | |
| 国際調査で利用した電子データベース (データベースの名称、調査に利用した用語) | | | |
| C. 関連すると認められる文献 | | | |
| 引用文献の カテゴリー* | 引用文献名 及び一箇の箇所が関連するときは、その関連する箇所の表示 | 関連する 請求の範囲の番号 | |
| X | JP 11-346210 A (日本電信電話株式会社) 1999.12.14, 第1-62段落 (7ページ) | 1-6 | |
| <input type="checkbox"/> 本欄の続きにも文献が列挙されている。 <input type="checkbox"/> パテントファミリーに関する別紙を参照。 | | | |
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| 国際調査を完了した日 | | 国際調査報告の発送日 | |
| 04.07.02 | | 23.07.02 | |
| 国際調査機関の名称及びおて先 | | 特許庁審査官 (特許のある職員) | |
| 日本国特許庁 (ISA/JP) 郵便番号 100-8915 東京都千代田区霞が根三丁目4番3号 | | 中里 裕正 | |
| | | 電話番号 03-3581-1101 内線 3597 | |

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